ET: CU-5093

PATENT

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Dong-Woon BAI et al.

Serial No.: 10/593,011

**Group Art Unit:** 

Filed: September 18, 2006

Examiner:

For: DIVERSITY TRANSMITTER-RECEIVER IN CDMA SYSTEM USING SPACE-TIME

CODE, AND METHOD THEREOF

# Certification under 37 CFR 1.8(a)

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with The United States Postal Service with sufficient postage as first class mail in an envelope addressed to The Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450 on March 5, 2007.

Benjamin Horton

The Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

# TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT (IDS) WITHIN THREE MONTHS OF FILING OR BEFORE MAILING OF FIRST OFFICE ACTION

The information disclosure statement submitted herewith is being filed within three months of the filing date of the application or date of entry into the national stage of an international application or before the mailing date of the first Office Action on the merits, whichever event occurs last. 37 CFR 1.97(b).

No fee is believed to be required in view of the above. However, if this is not the case, the Commissioner is authorized to charge our Deposit Account No. 12-0400 for any required fees.

2 Date: March 2007

W. William Park, Reg. No. 55,523

Ladas & Parry

224 South Michigan Avenue

Chicago Illinois 60604 Tel. No. (312) 427-1300



PATENT

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Dong-Woon BAI et al.

Serial No.: 10/593,011

**Group Art Unit:** 

Filed: September 18, 2006

Examiner:

For: DIVERSITY TRANSMITTER-RECEIVER IN CDMA SYSTEM USING SPACE-TIME

CODE, AND METHOD THEREOF

#### Certification under 37 CFR 1.8(a)

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with The United States Postal Service with sufficient postage as first class mail in an envelope addressed to The Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450 on March 5, 2007.

Benjamin Horton

The Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

### **INFORMATION DISCLOSURE STATEMENT (IDS)**

Applicant submits herewith patents, publications or other information of which Applicant is aware, which may be material to the examination of this application and in respect of which there may be a duty to disclose under 37 CFR 1.56.

No paper copies of the U.S. patent references identified in this IDS, if any, are submitted herewith as they are no longer required by the USPTO rules. Only the copies of foreign patent and/or other relevant publication references are submitted herewith.

The filing of this information disclosure statement shall not be construed as a representation that a search has been made (37 CFR 1.97(g)), an admission that the information cited is, or is considered to be, material to patentability or that no other material information exists.

The filing of this information disclosure statement shall not be construed as an admission against interest in any manner. Notice of January 9, 1992, 1135 O.G. 13-25, at 25.

The references submitted herein are listed on PTO-1449 form (modified) enclosed herewith. A copy of each reference listed is being furnished except any duplicate or cumulative patents or publications specified otherwise.

A translation of any foreign language reference, if any, is indicated in PTO-1449 form and being submitted herein if it is readily available. Otherwise it should be construed that such translation is not readily available.

The Statement is made on the basis of the information:

<u>X</u> supplied by an individual associated with the filing and prosecution of this application (37 CFR 1.56(c));

Date: March 2 , 2007

W. William Park, Reg. No. 55,523

Ladas & Parry

224 South Michigan Avenue

Chicago Illinois 60604 Tel. No. (312) 427-1300 MAR 0 8 2007
Form PTO-1449 (Modified)

| FORM PTO-1449                                    | ATTY, DOCKET NO.<br>CU-5093    | SERIAL NO.<br>10/593,011 |
|--|--------------------------------|--------------------------|
| INFORMATION DISCLOSURE<br>STATEMENT BY APPLICANT | Applicant Kong-Woon BAI et al. |                          |
| (37 CFR 1.98(b))                                 | September 18, 2006             | GROUP                    |

#### **U.S. PATENT DOCUMENTS**

| EXAMINER<br>INITIAL | PATENT<br>DOCUMENT | ISSUE/PUB<br>DATE | PATENTEE          | CLA<br>SS | SUB-<br>CLASS | FILING DATE |
|---------------------|--------------------|-------------------|-------------------|-----------|---------------|-------------|
|                     | US6515978          | 02/04/03          | Buehrer et al.    |           |               |             |
|                     | US6452916          | 09/17/02          | Hochwald et al.   |           |               |             |
|                     | US6115427          | 09/05/00          | Calderbank et al. |           |               |             |
|                     |                    |                   |                   |           |               |             |
|                     |                    |                   |                   |           |               |             |
|                     |                    |                   |                   |           |               |             |
|                     |                    |                   |                   |           |               |             |
|                     |                    |                   |                   |           |               |             |
|                     |                    |                   |                   |           |               |             |

FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

|                  |                    |             |               |                                       | •        |                 |             |
|------------------|--------------------|-------------|---------------|---------------------------------------|----------|-----------------|-------------|
| EXAMINER INITIAL | DOCUMENT<br>NUMBER | PUBL. DATE  | COUNTRY OR    | CLASS                                 | SUB-     | TRANSL<br>YES I | ATION<br>NO |
| HATTIDAL         | NUMBER             |             | PATENT OFFICE |                                       | CLASS    |                 |             |
|                  | 1 .                |             |               |                                       |          |                 |             |
|                  |                    | <del></del> |               |                                       | <u> </u> |                 |             |
| l .              |                    |             |               |                                       |          |                 |             |
|                  |                    | i"          |               | · · · · · · · · · · · · · · · · · · · |          |                 |             |
|                  | <u> </u>           |             |               |                                       |          | L               |             |
|                  |                    |             | <del></del>   |                                       |          |                 |             |
|                  |                    |             |               |                                       |          |                 |             |
|                  |                    |             |               |                                       |          |                 |             |
| 1                |                    |             |               | i                                     | í        | l               |             |

OTHER DOCUMENTS (Including Author, Title, Date, Place of publication)

| Tarokh, Vahid, et al., "Space-Time Codes for High Data Rate Wireless   |
|--|
| Communication: Performance Criterion and Code Construction", March 1998,   |
| IEEE Transactions on Information Theory, Vol. 44, No. 2.   |
| Choe, S., "Space-Time Trellis-Codes for High Rate Wireless CDMA Systems", March 20, 2003, <i>Electronics Letters</i> , Vol. 39, No. 6. |
|  |
| DATE CONSIDERED  |
|  |

EXAMINER: Initial citation considered. Draw line through citation if not In conformance and not considered. Include copy of this form with next communication to applicant.

(Form PTO-1449) 3-2-07